



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,502	09/25/2003	Jean-Christophe Ehrstrom	22130-00030-US	4577

30678 7590 11/18/2005

CONNOLLY BOVE LODGE & HUTZ LLP  
SUITE 800  
1990 M STREET NW  
WASHINGTON, DC 20036-3425

EXAMINER
----------

LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
----------	--------------

1775

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/669,502

Applicant(s)

EHRSTROM ET AL.

Examiner

Michael La Villa

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
2. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-80 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - I. Regarding Claims 1 and 66, it is unclear what range of magnesium content is encompassed by the claimed "about 4% to about 6% based on the weight of the alloy." At paragraph 21 of the Specification, applicant explains that this phraseology encompasses any amounts of Mg outside of the explicit limits which amounts confer novel properties of this invention. It is unclear how to assess this range. At paragraph 27, applicant explains that "any Al-Mg plate or sheet can be used if desired." It is unclear whether any boundary is set by this limit, and, if a boundary is set, it is unclear what it is. Specifically claimed 5186 contains 3.5 weight percent Mg. Is this well within the claimed range or at the outer reaches?
  - II. Regarding Claim 3, it is unclear whether the "two external faces" are additional elements to the "N metal sheet layers" or merely a characterization of those of the "N metal sheet layers" that are positioned on the outside of the composite.

Art Unit: 1775

- III. Regarding Claim 5, it is unclear whether, when more than one sheet is present that is 5182 or 5186, they must all meet the thickness requirement.
- IV. Regarding Claim 66, it is unclear what are the structural and compositional requirements of faces other than the first two.
- V. Regarding Claim 72, it is unclear what are the compositions of the five layers and the relationship among the claimed layers, as Claim 66 only describes two faces and one adhesive layer between them. Is the third layer either of the face metals sheet layers?
- VI. Regarding Claim 77, it is unclear what is being compared by the language "Glare-type composite laminated sandwich panel incorporating 2024T3." Applicant contends that this is a well-known comparison. Is the comparison panel the Glare type panel of paragraph 34 of the Specification? Is there any degree of similarity in terms of structure that is required between the claimed and comparative composites? For example, must there be the same number of metal layers and polymeric layers?

***Claim Rejections - 35 USC § 102***

- 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
- 5. A person shall be entitled to a patent unless –
- 6. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1775

7. Claims 1, 3, 6, 7, 22, 24, 27, 28, 43, 45, 48, 49, 66, 67, 70, 71, and 77-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Sobolev USP 5,219,629 for the reasons of record in the Office Action mailed on 6 June 2005.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1-7, 22-28, 43-49, and 65-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schalkwuk WO 98/53989 for the reasons of record in the Office Action mailed on 6 June 2005.

11. Claims 1-7, 22-28, 43-49, and 65-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roebroeks USP 5,547,735 for the reasons of record in the Office Action mailed on 6 June 2005.

***Response to Amendment***

- I. Regarding the objection regarding incorporation by reference in the Office Action mailed on 6 June 2005, it is withdrawn in view of applicant's contention that no essential material has been omitted from the Specification.
- II. In view of applicant's amendments and arguments, applicant traverses the section 112, second paragraph rejection of the Office Action mailed on 6 June 2005. Rejection is withdrawn except as repeated above for the reasons given above.
- III. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Sobolev of the Office Action mailed on 6 June 2005. Applicant argues that the sheets of Sobolev have less than 4 weight percent Mg and hence do not meet the claimed terms. However, applicant's "about" language encompasses amounts less than 4 weight percent, and so the argument is not persuasive. See the section 112, second paragraph rejection on this language as set forth above.
- IV. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Schalkwuk of the Office Action mailed on 6 June 2005. Applicant argues that the suggested Al-Mg sheet in Schalkwuk has less than 4 weight percent Mg and hence does not meet the claimed term. However, applicant's "about" language

encompasses amounts less than 4 weight percent, and so the argument is not persuasive. See the section 112, second paragraph rejection on this language as set forth above.


- V. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Roebroeks of the Office Action mailed on 6 June 2005. Applicant argues that the suggested Al-Mg sheet in Roebroeks has less than 4 weight percent Mg and hence does not meet the claimed term. However, applicant's "about" language encompasses amounts less than 4 weight percent, and so the argument is not persuasive. See the section 112, second paragraph rejection on this language as set forth above.
- VI. With respect to each of the prior art rejections, applicant traverses rejections of Claims 77-79 on the grounds that the claimed mechanical properties are not taught or suggested. Recognizing that there is indefiniteness as to what is being claimed, it is noted that, as described at paragraph 27 of the Specification, good results are generally obtained from any Al-Mg sheet, which includes series 5000 materials. Since the prior art is suggesting using series 5000 materials, the contention that the claimed laminates, obtaining the claimed properties, are not anticipated or rendered prima facie obvious is not persuasive without evidence to that effect.

Art Unit: 1775

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa  
31 October 2005

  
MICHAEL E. LAVILLA PH.D.  
PRIMARY EXAMINER